## SAFETY LOCK

FOR

SEMIAUTOMATIC HANDGUN

## Hand Gun Safety Device

Safety Lock For Semiautomatic Hand Guns

I. When installed on a weapon this lock prevents the safety from being taken from safe to fire position. This device will provide a back up to a guns existing safety.

The safety lock can be engaged and disengaged by inserting a key into the safety lock, pressing down and turning: see diagram on page 6 0f 7.

This device can be added to existing weapons by drilling a hole just below the safety and inserting device.

See page 6. It can also be added to new guns at the time on manufacture. Thus becoming a part of the weapon, eliminating the necessity of putting a device on and taking it off each time the weapon is used.

II. Figure 12 shows bottom of core with lockarms, spring pins, key grooves and two springs. This can be found on page 3 0f 7. Also shown on his page, fig. 10 and 11 shows lock in fire position, (fig 10) and in safe position, (fig 11). Exploding view shows how device is assembled; see page 4 0f 7.

Figure 5A (base plate) shown on page 2 of 7 is secured to bottom of figure 3b (outer casing) with weld;
Figure 4 (lockcore) show how to assemble lock; figure 6A (lock arm) is inserted into lock armslot and secured with figure 7 (lock arm securing pin) which are pressed into holes drilled in both sides of the core. Holes are also drilled in face of core, and bottom to secure spring pin, (see fig. 4c and 4d) on page 2 of 7.

Cut sheet metal to size (see fig 1,2,3) make all cuts, holes indentations, slots, grooves and circles: (see fig 1a, 2a, 3a). Allow 1/16<sup>th</sup> off an inch for tooling, dye cuts and squaring. All sheet metal parts are made on punch press with custom tools and dyes.

Form to shape and size: (see figs 1b, 2b, 3b) center piece of lock is formed by aluminum extrusion dye shown in figure 4a on page 1 0f 7. Figure 4 shows different view of lock core, fig 4b and 4c.

Base plate is cut from section of fig 2a, locking notches are made at the same time, base plate is 3/8<sup>th</sup> inches in diameter x 1/64 inches thick, locking notches are 1/16 of inch high (see fig 5a). Device will require two locking arms, four casing studs and two locking arms securing pins

1/8<sup>th</sup> of an inch long. See figure 6 and 7 on page 2 of 7. It will also need two springs pins 1/8<sup>th</sup> of an inch long, 5/64<sup>th</sup> of an inch in diameter with flared head (see fig 8). Next, you will need two springs (see fig 9). All of the above parts can be prefabricated or customized in metal shop.

The next step is to secure inner casing to lock core. Lock Core is inserted into figure 2b, and secured with7a (casing studs), Figure 6 (lock arm) is placed into lock arm slot and secured with figure 7b. Insert figure 8 (spring pin)(see page 3 0f 7) into spring hole, securing figures 9 and 9a (springs) to bottom of lock core. Figure 2b is inserted in figure 3b and secured with fold over flaps. See diagram page 4 of 7.

Next, drill hole in gun, just below safety hole should be 11/32 off an inch in diameter, (see page 5 of 7). Insert lock and secure with weld. See pages 5 of 7 and 6 of 7, and 7 of 7, they show lock in safe position and fire position. Add cover (fig 13)( see page 3 of 7) and seal to lock, Gun is ready to fire, cover is prefabricated from manufacturer.

This lock prevents the safety from disengaging it also prevents the slide from moving back to engage a

round, thus preventing weapon from firing when lock is in the safe position. Turn the key counter-clockwise to disengage the lock so the safety can be moved to the firing position. (see fig 5 of 7 and 6 of 7).

This device requires three pieces of sheet metal cut to specifications, (see fig 1) 1 inch X's 5/8<sup>th</sup> of an inch X's 1/16<sup>th</sup> of an inch for key and key ring (see fig 2) 1 inch X's ½ of an inch X's 1/32<sup>nd</sup> of an inch for outer casing, lock core is formed by aluminum extrusion 3/16<sup>th</sup> of an inch X's 11/32<sup>nd</sup> of an inch (see fig 4a). The overall diameter is 13/32<sup>nd</sup> of an inch.

This device will address the need of government, federal, state, local and private sectors for a hand gun safety device that is effective and easy to operate.

This device is easy to make and inexpensive to install on existing weapons as well as new weapons. The safety lock would require only minor modification of new weapons and is easy to install on existing ones: